

Abstract Submitted
for the APS97 Meeting of
The American Physical Society

Sorting Category: J.10

J/Psi Suppression and the Quark-Gluon Plasma

MEGAN JUSZKIEWICZ¹, State University of New York at Stony Brook, Stony Brook, NY — A hot soup of fundamental particles known as the quark gluon plasma is believed to have been formed shortly after the big bang. By colliding heavy ions, researchers hope to create conditions that will reproduce this plasma. In 1986, it was suggested that a suppression in the production of J/Psi mesons, during heavy ion collisions, would be a signature for the quark-gluon plasma. Since then, studies at heavy ion colliders, including RHIC at Brookhaven, have observed this suppression. Some of the latest results from the PHENIX group concerning the J/Psi suppression will be presented, along with how they observe such a signature. This talk will also discuss why this suppression is believed to indicate the deconfinement of quarks, and provide an introduction to the quark-gluon plasma.

References:

1. T. Matsui, H. Satz, Phys. Lett. B 178, 416 (1986)
2. Nucl-ex/0510051 v1 17 Oct 2005

1

- Prefer Oral Session
 Prefer Poster Session

Megan Juskiewicz
megz1238@yahoo.com
Stony Brook University

Date submitted: February 8, 2006

Electronic form version 1.4